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Children's Day

" There is only one child in the world and the child's name is All Children ".

—CARL SANDURG

These significant words were uttered by a great lover of children Of course, we are all lovers of children—in our own way. What do these words awaken in us? Certainly, the best and the noblest.

Yes, every one should have a deep concern for children—for children everywhere. It enriches our life. It makes life worth living. No wonder, at the United Nations, the world's conscience framed the words—" Mankind owes to the child the best it has to give. . . . ", in the famous Declaration of the Rights of the Child.

We think we know so much about children. Why, we almost take them for granted. But are we aware that we have certain responsibilities towards them? Well, we are not talking here of " my child " or " your child ", but of " all children ".

Children's Needs

The most essential of children's needs are : health, adequate food, education, protection and care. Varied programmes to meet these needs are under way in many countries. They transcend national frontiers. They are, thus, a problem of every group, family and individual in every country.

In calling for the observance of Universal Children's Day the United Nations General Assembly stated : " The obligations of the United Nations to succeeding generations can only be fulfilled by increased efforts on behalf of the children of the world, who are the citizens of tomorrow."

To support national projects for the welfare of the children, the resources of the international community have been mobilised in the greatest effort of its kind ever undertaken for children by the United Nations Children's Fund (UNICEF). One hundred governments voluntarily provide the funds to enable this organisation to give less developed countries the aid they need to establish and broaden programmes for the children. The stress is on permanent improvements. It helps Governments to build milk plants, to train health workers and to teach good eating habits. Every new programme, firmly set up stimulates greater efforts for the welfare of children and leads to a future generation of more productive adults, better able to care for their children.

In the life of an individual, the community and the nation, a Day is set apart for re-dedication to the values which we cherish most. It is a Day of remembrance. As in the past, we are observing the Children's Day every year on November 14, the birthday of our late Prime Minister, Shri Jawaharlal Nehru. How appropriate it is! For, this great man always loves to be in the midst of children.

Theme of Children's Day

The Children's Day focusses the attention on the theme: "The rights of every child, the responsibility of every adult and every community." Thus, it is not only a national problem, but a community problem and an individual problem. In raising a generation of free, well-adjusted citizens of tomorrow, every individual and community has a stake. It is a challenge that can be met only by co-operative effort. For, the welfare of the child is the welfare of the nation.

To talk of the rights of the child may appear at first sight too academic or even unrealistic. For, you do not expect a child to assert his rights. But it is the duty of every adult and every community to define the rights and discharge the obligations. It is, indeed, a collective responsibility.

The Declaration of the Rights of the Child clearly states that every child, regardless of race, colour, nationality or the parent's position in the world, is entitled to special protection during his tender years, and to the kind of education that will enable him to develop his latent abilities and become a useful member of the society. The child, it says must be cared for with due respect for the family as an entity. He must be given the means requisite for his normal development, materially, morally and spiritually. The child that is hungry must be fed; the child that is sick must be nursed; the child that is physically or mentally handicapped must be helped; the right time, to earn a livelihood, and must be protected the waif must be sheltered and succoured. The child must be the first to receive relief in times of distress; he must enjoy the full benefits provided by social welfare and social security schemes; he must receive a training which will enable him, at the right time, to earn a livelihood, and must be protected against every form of exploitation. He must be brought up in the consciousness that his talents must be devoted to the service of his fellowmen.

A Great Problem

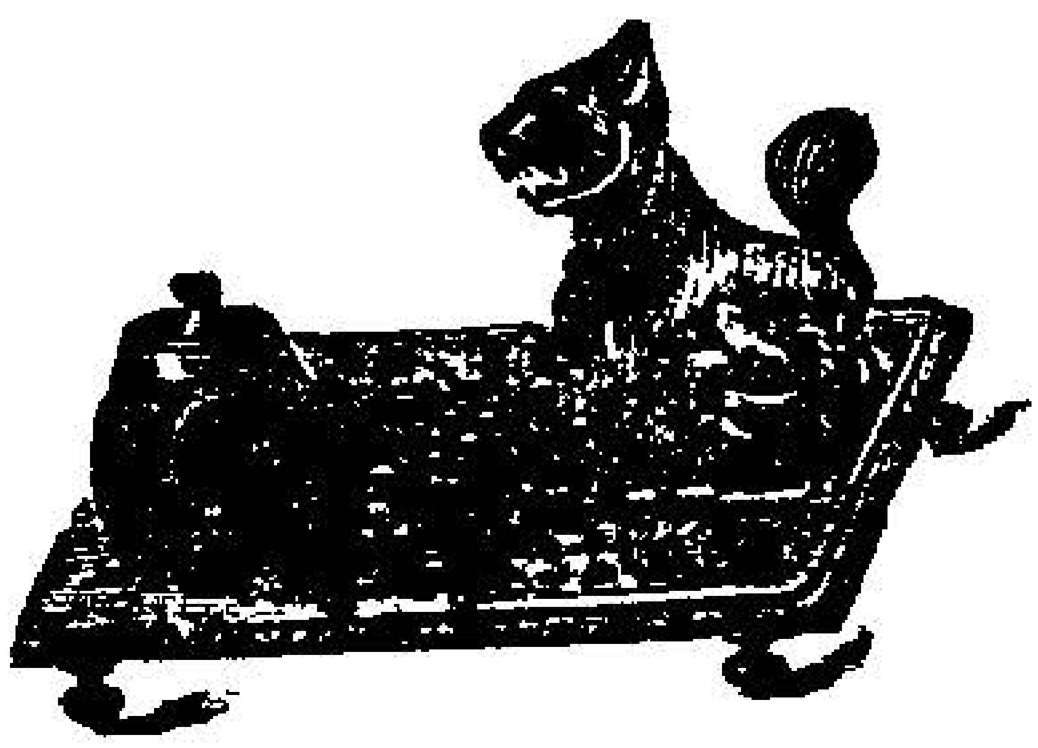
In India, we are painfully aware of the impediments of poverty, ignorance and superstition in dealing with the problem of such great magnitude. But the child is entitled to his rights whether he is handicapped, maladjusted, deprived or destitute, whether he is retarded or talented, whether he belongs to this community or that community.

The child has rights to the opportunities that will develop him to his fullest potentialities. It is his privilege and our duty that he be given the maximum requirements for attaining good physical and mental health, through sanitary and hygienic conditions, through a balanced and adequate diet, through education and through an understanding and affectionate environment provided by his parents and the community.

On this Children's Day, every adult should do a little heart-searching. He should feel within himself a sense of individual responsibility, a profound knowledge of the needs of children and should try to do something to ameliorate the situation, however humble his part in it may be.

It is not necessary for us to shout slogans. We have only to look around in our own neighbourhood to find the deprived and destitute child, in the city and in the countryside. Let us resolve on this Day to do something concrete—however little—for the alleviation of suffering of the child. There are crying needs. It may be a problem of milk supply in one mohalla or of rendering some monetary help to an orphan in another.

A further element in the observance of the Children's Day is the promotion among children of a feeling of fraternity, of kinship with all the other children of the world. Many concrete expressions of this kinship have come from the children on the occasion of the Children's Day in their enthusiastic contribution of small personal sums of money to be used to help the less fortunate children. As young children learn more of the lives of other children, they strengthen the bond which unites all children and develop the sense of personal responsibility, understanding and respect, essential to the achievement of the goals which the United Nations stands for.



The Role of Field Study and Demonstration Centre in Health Education

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The scheme 'describing State Health Education Bureaux specifies a Field Study and Demonstration Centre as an essential component of that organisation. Its main purpose is to test out on a pilot basis ways to make health education more effective and demonstrate how these tested procedures where used in an ongoing programme will pay rich dividends for the effort and money expanded. The demonstration phase embraces showing how the existing public health personnel in their daily activities can practice effective health education. More specifically it is concerned with five major types of activities :

1. *Testing ways to make use of new knowledge or initiate new programmes in an effective way.* For example, it may be administratively decided to initiate a trachoma control programme in a State, or diptheria, pertussis, and tetanus immunization programme. The Field Study and Demonstration Centre can make a thorough analysis of what are the target audiences both among the public and health prosessional groups, and the specific actions these audiences must take. It can make sampling surveys of what these targets audiences now know and do, and learn from them suggestions for the educational phase of the programme. It then systematically plans a series of educational activities designed to reach the target group and assure their full participation in the control programme. These first steps are common to all well planned programmes. The unique role of the Field Study and Demonstration Centre is that it not only develops plans but it also tries them out on a pilot basis to find any flaws in the plans before they are finally put into operation. It then

undertakes to adjust the plans so that they are more effective. Several trials may be made before satisfactory adjustments are reached. Ideally all of this preliminary work is done with respect to each programme, but when circumstances prevent the ideal method, the centre does as much study and demonstration as is practical. Such intensive small-scale trials improve the final overall effort and save personnel, time and money.

Or take another example having to do with educational procedure. Group discussion has been shown to be an effective educational method when certain specified conditions are met. The Field Study and Demonstration Centre may use this method on an intensive basis, with a variety of population groups and many different health programmes. It will keep careful records of the factors associated with success or failure. From these intensive experiences it can make available to other workers concrete statements of principle so that others may use the method more effectively. In similar manner the centre will test out the practical application of new social science theories and findings to see how they apply in health education.

2. *Finding ways of improving the effectiveness of existing programmes and removing barriers to the lack of participation or co-operation.*—When people do not participate and carry out the health education advice about a health problem, the Field Study and Demonstration Centre undertake to find out the cause. The reason may lie in the way in which the education has been carried on; it may be that the people have conflicting goals: or it may be that the services being rendered do not satisfy the people. Let us look at one or two examples. In a D.P.T. immunization programme, mothers failed to bring their children for the second and third dose. The first inoculation was given by the doctor at an out-patient clinic when the children were brought in. Observation of the operation of the clinic revealed that there was little or no time for the doctor or nurse to educate the mothers

about the need for additional doses when the first dose was given, and also the exact address of the mothers was not written down so that follow-up could be made. Here at least were two reasons for lack of complete immunization. Inquiry of some of the mothers disclosed that they had not been told about the minor reactions that might occur, and were not willing to have their children made sick again. With this diagnosis of the reasons, the Field Study and Demonstration Centre could design possible ways of removing these barriers to completion of the immunization. A community educational programme of mothers before going to the clinic was initiated, the record of the child was revised to include a complete address for follow-up, and arrangements were made for the Health Visitor to see the cases with reactions on the second day.

In a latrine programme, the health workers were trying to get the house-holders to instal a standardized type of latrine of minimum cost. Very few of the villagers would co-operate. Inquiries of the people who had not installed latrines revealed several attitudes among the people that had not been taken into account. The well-to-do in the village were concerned with status. They wanted a better looking and more permanent latrine one with a larger pit so it would not have to be cleared, or moved so often, and a brick or mortar superstructure instead of bamboo screen enclosure. But the health workers concerned with keeping down the cost were insisting on the less expensive latrine. Others complained that the pit would collapse during the monsoon season. They were assured it would not, but a year later some of the pits did collapse. Not too much effort nor precise measurement was required to find out that the health workers plans had not taken into account the attitude of the people, their own knowledge and wants. Only a slight modification in the programme plans, including lining the pits and developing different quality latrines for those willing to pay more, brought about greater acceptance.

In a dental programme for the American Indians it was found that too many patients were having hæmorrhages after a tooth was pulled. The dentists developed a card of instructions to be followed by the patient after extraction. Still there were almost the same number of hæmorrhages. A health educator suspected that the instructions were not being understood. She asked a bi-lingual Indian to translate the dentists instructions into the native language and then asked another bi-lingual Indian to translate the native language version back to English. In this way she located specific critical points of misunderstanding, changed the words on the dentist's card and the number of cases of hæmorrhages were reduced.

All good practising health education should be alert to weaknesses in their programmes and be constantly revising their methods to increase results. However, the Field Study and Demonstration Centre can probe more deeply into problems because it is more adequately staffed both in terms of members and categories of personnel.

3. *Pre-testing and evaluation of materials.*—The Centre provides the ideal unit to pre-test any educational material that the Health Education Bureau may produce. It has the personnel and serves a large enough unit to select a few localities for all such tests.

The Field Study and Demonstration Centre for several States has already functioned in this capacity of pre-testing some of the materials before they are distributed. Likewise the Central Bureau has tested a number of its folders and posters before they were issued.

4. *Developing tools for base-line surveys.*—To plan the educational phases of any health programme, certain base-line information is needed. Only that data should be collected which will have an influence on the plans for the educational component of the programme. The Field Study and Demonstration Centre should develop the kinds of data-collecting tools (statistical tables, questionnaires, interview

schedules, etc.), that can easily be used by the practising health personnel. Furthermore it should also develop the way to use the data in programme planning.

5. *Training.*—Because of its study, testing and exploring activities, the demonstration area becomes a useful place for field experiences of health personnel. However, the staff assigned to Field Study and Demonstration work should not be expected to carry on the full training responsibilities of the State Health Education Bureaux, assigning the full training function to the field study and demonstration staff will either result in poor training and/or a neglect of the study and demonstration function. Experience in some of the on-going studies by trainees will be valuable training, provided it fits into the study objectives. In no case should the training requirements interfere with the study and demonstration functions of the Centre.

Selection of the Field Study and Demonstration Centre

In the Scheme for State Health Education Bureaux it was specified that the Field Study and Demonstration Centre should be located in the Primary Health Centre of a Community Development Project (100 villages with 70 to 75,000 population) and should be an integral part of the Health Centre. In addition it should have access to the area and villages of an adjoining Block in which to carry on some of its study and demonstration activities. The villages of the second Block can serve as control groups, or permit experimentation in populations who have not been participating in previous activities of the Centre.

Several other criteria should be used in the selection of a suitable area for the Centre. Among them are :

(1) *Representative of conditions in the State.*—Since the Centre's function is to develop procedures for the State as a whole, it should conform as nearly as possible to the average conditions existing throughout the State. For example, it should not be located where there is the highest concentration of health and medical care facilities nor in an area with

the minimum of service facilities. It should include both small and large villages, those near main roads and those more isolated. If there are several urban areas in the State at least one such town should be in the area served by the Centre. The average socio-economic and educational level should correspond as closely as possible to the average for the State as a whole. The area should be one in which reside the primary ethnic, cultural and religious groups of the State. The health problems in terms of disease incidence, sanitation housing, etc., should be typical of those throughout the State.

The area should be one in which not more than the usual number of other community programmes are being demonstrated. However, it should be an economically growing area, because this factor indicates a potential for change that is not present in a traditional and stagnant economy. Where there are large areas and populations with grossly dissimilar health problems and culture it is desirable to have more than one Centre to serve these regions.

(2) *Attitude of staff.*—The Centre can carry on its work much more easily if the staff in the area—particularly the district medical officer and the medical officers in the Primary Health Centres—have an experimental attitude. They should freely permit the collection of data among the people in the community as well as in the health unit and should tolerate the trial of new procedures even though they temporarily upset the established routines. Hopefully, they would have a vital interest in the outcome of any study or demonstration.

It may not be possible to find the ideal staff, but rigid and inflexible administrators and non co-operative Health Unit staff should be avoided.

3. *Geographic location.*—A minor consideration in the selection of an area is its accessibility to the staff of the State Health Department. Since the Unit will be developing and testing procedures for general use throughout the State

it is vital that there be ready communication between the staff of the Centre and those workers who are responsible for State-wide activities. When only a short distance exists between the State headquarters and the Centre there will be much more personal communication and exchange than will occur when the distance is considerable.

Planning the Programme

One of the valuable assets of a Field Study and Demon stration Centre is the freedom and flexibility with which it can plan programme. Rather than carrying on prescribed regular activities, it is free to undertake whatever studies or demonstrations that seem to contribute most to effective health education. Some of the events that may influence the programme on which the Centre will work, are :

1. The Central Health Ministry, State Department or District Health Unit have decided to undertake a new programme such as district tuberculosis control to intensify a programme that is already functioning such as the applied nutrition programme. Both of these require informing the people and assuring their full participation. Some guidance for the educational activities may be suggested by the director of the specific programme. The Centre should undertake to test out the suggestions, locate possible obstacles that may reduced participation of the villagers, make adaptations in the activities, or even develop different methods of achieving the educational goal. The initiation or revision in new service programmes should receive highest priority in the choice of problems on which to work.

2. A member of the health team, physician nurse, health inspector, etc., complains that the people do not co-operate. They are not doing what is advised or they are not making use of available services. Any such complaint becomes an area for study in order to determine the degree to which there is lack of co-operation, diagnose the cause and institute the necessary changes to insure participation.

3. A new procedure for education such as programmed learning and teaching machines, or a new behavioural science finding such as the value of fear to motivate good health becomes available. The Field Study and Demonstration Centre Investigates, the applicability of the method of scientific finding in practical day to day health education programmes.

4. A member of the Field Study and Demonstraion Centre observes the services being provided by others in the Health Unit. His observations suggest a lack of understanding of the service by the people, or dissatisfaction with some aspect of the service. He or his associates in the Centre may study the reason for dissatisfaction and experiment with ways to make the service more meaningful and satisfying.

5. A study of Health Centre records of services given reveals some undesirable practice such as certain groups using all the services and others seeking no care at all. It may show that those seriously in need of service are the people who utilise the Health Centre most. The Field Study and Demonstration Centre diagnosis the reason for the difference and experiments with methods to correct the inequalities of service.

Regardless of the event that triggers the activity of the Centre, the study approach always focusses on the practical operational problems in health education and seeks ways to solve them.

This focus on field problems and solving them in a practical way is the feature that differentiates the Centre's activities from research.

Local Health Education Committee

For each of its demonstration projects the Centre can benefit from a local Committee of prominent leaders in the village as described in the scheme for State Health Education Bureau. The Committee's responsibilities embrace advice

in planning, mobilization of local resources for the project, enlisting whatever public participation may be necessary and providing public support for the experimental programme.

The Committee would not be an evaluation body set up to judge the success of the project. Early orientation of the Committee to their role of contributing to the success of the project will help them to function constructively.

Administration of the Centre

The Field Study and Demonstration Centre is a major section or Unit of the State Health Education Bureau. At the same time as has been previously mentioned, it is part and parcel of the Primary Health Centre in which it is located. Also it has working relations with the Health Centre in an adjoining block. These facts raise important questions about administrative and supervisory responsibilities. To whom should the Chief of the Centre be responsible? What are the administrative and supervisory responsibilities of the State Health Education Bureau, the District Medical Officer, the Medical Officer in charge of the Health Centre in which the Centre is located and the Medical Officer of the adjoining Block? There are no clear-cut or easy answers to these questions. Neither are there any patterns of administrative or supervisory relationships that can assure completely smooth functioning. Each State needs, to work out its own administrative and supervisory patterns.

Two possible patterns can be suggested :

1. The Medical Officer in charge of the Primary Health Centre would have administrative responsibility for the personnel of the Centre, their time schedules, leave, pay efficiency ratings and relations to other members and programmes within the Primary Health Centre. The State Health Education Bureau would exercise technical supervision over the programme work of the F.S. and D. Centre. Under this arrangement the District Medical Officer would maintain

administrative supervision through the Medical Officer of the Centre, but would have no technical responsibility for dicisions about programme activities of the F.S. and D. Centre. Requests for administrative decisions would be channelled through the Medical Officer of the Centre to the District Medical Officer. Communications on technical matters of programme content and operations would be channelled directly to the State Health Education Bureau.

2. Another pattern gives the State Health Education Bureau complete administrative responsibility for the Primary Health Centre in which the Field Study and Demonstration Centre is located. This procedure has the advantage of straight-line administration though it loses the advantage of functioning within the existing structure, coupled with a possible loss of the District Medical Officers interest.

In deciding on an administrative frame-work several factors should be kept in mind :

1. The purpose of the Centre is to find new and better ways of conducting health education. Therefore, the administrative structure and technical supervisory relationships should be sufficiently flexible to allow the testing of new and imaginative ideas.

2. The staff of the F.S. and D. Centre requires ready access to the best technical health education consultation and advice available in the State. Medical administrators either in the districts or in the Health Centres seldom are leaders or specialists in health education capable of providing the consultation needed.

3. An administrator responsible for an overall programme cannot allow it to be completely jeopardised by experimentation conducted by the Field Study and Demonstration Centre.

4. The Field Study and Demonstration Centre should have the maximum freedom of activity and yet remain an integral part of the Primary Health Centre and its staff.

If all parties involved can keep uppermost the goal of better service to people and remain flexible in their attitude towards the administrative arrangements, the conditions laid down above can be easily met.

Summary

The Field Study and Demonstration Centre is a vital section of the State Health Education Bureau. It experiments in the Field on the most effective ways to carry on health education about various health problems. Some of its functions, some criteria for selection of site, development of programme and administrative features are discussed.

Questions for discussions

1. Cite illustrations of problems on which field study or demonstration might have been helpful.

2. Are there functions other than these listed which are important for a Field Study and Demonstration Centre to carry on?

3. What should be the relationship of the Research Evaluation Section of the C.H.E.B. to Field Study and Demonstration Centres in the States? What services should each expect from the other?

4. Are there other important criteria to use in selecting the area for a Centre?

5. Describe one or more projects carried on by the Centre in your State that improved health education about some health problem.

6. What determine the problem on which Field Study and Demonstration Centre works? Who makes the decisions about programme of the Centre and on what criteria?

7. How can the activities and findings of the various Field Study and Demonstration Centre be shared among States and with Health Education Profession?

Man and his Environment

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MAN cannot live in isolation. He has to live in harmony with his environs. He is a social-being but is highly developed in contrast to the animal or vegetable kingdom, which also lives and grows with him. Man differs as he has some definite functions to perform as against the vegetable or animal world for which the latter cannot easily adjust or adapt itself. Man occupies a special highly exalted position in his environs than any other biological organism. He depends mostly on his environs for his basic needs such as air, water, food and shelter. The environment which is so indispensable for his survival and development also moulds his life and plays an important role in maintaning and promoting his health and eliminating and keeping the agents of disease under control. An un-balanced inter-action of three factors, the host, the agent, and the environment, results in a disease process and the severity of the disease is directly proportional to the degree of mal-adjustment among these factors. Continued *controlled adjustment of Man's environment* aimed at the eradication of the disease producing agents has in some advanced countries wiped out diseases like cholera, typhoid, plague etc., etc. The achievement of a state of complete well-being will be within the reach of all people if they live in a clean environment.

Cleanliness is next to godliness—a truth upheld by all faiths and countries—valued asset of every individual and community as a whole, and it is the cheapest method of prevention of disease, promotion of health and prolongation of life.

No organism is an entity by itself. The plants which manufacture their protoplasm from the air and soil and thus made a real gain in living matter from the inanimate are food

for herbivorous. The flesh or herbivoures is consumed by carnivores; these in turn succumb to otherkind and bacteria. All flesh must die and feed the multitude of small creatures which see the inrotting matter and return it finally again to the air and the soil.

Ecology is fundamentally the inter-action of different patterns of nucleoproteins each under pressure to establish its seed upon the earth and to convert matter into its own substance. This ecological struggle in which animals die young and violently is one in which man must also participate. Much of Public Health can be seen as a struggle to escape from the conflict which bacteria and protozoa-aided by techniques which man's acquired wisdom gives him.

Man has begun to extricate himself from the primary biological issue, the struggle for the perpetuation of the species in which all other species are so completely absorbed. This emergence has been achieved through the great development of cerbral powers especially those of communication which has made possible to gather enormous knowledge and technique, and the bringing together of individuals for mutual protection. Not only man has shaken off the marauding carnivores and to a lesser extent the bacteria but he has begun to alter the environment itself. Forests are denuded and turned to aerable lands, marshes into cities, goats, cow and buffaloe into cattle, the yeast into protein, from agriculture to antibiotics; we find man changing the face of the earth, shaping it for his own comfort.

The various discoveries have however lightened the load of human suffering but man is not wholly free and does not have the pride of possessing absolute health. Each problem undertaken and solved uncovers another as in the peeling of an onion.

Ecology gives ground reluctantly and may hit back remorselessly and it should never be far from our thoughts as we battle with the problems of public health. Particularly is this so, when having upset the normal ecological balance

we live more and more in an artificial environment—a world of synthetic diets, and values of drugs and dust fumes and smoke from factories and various industries. And more recently we have added the radiation to the list of man-made hazards to the evironment and we know little of the deleterious effect which these innovations have upon the body.

Adoption of sanitary type of living is a qualitative aspect of living, and sanitation must come from within the people. What grows and develops from within the self, out of knowledge and fellow-consideration is a real education and conditions the entire mode of living. A mode of life that is conditioned or controlled by any external forces alien to indigenous pattern, at best lasts as long as the external pressure operates and usually does not produce a permanent change in the behaviour of people.

Thus man not only as an individual but as an integral member of a much larger group with health and sickness intimately sound with the conditions of life and work at home at office in the factory or in the field becomes the focus of attention to this new type of health care and health approach. Man cannot therefore be consorered apart—an isolated being whether he is well or whether he is sick. His totality in his surroundings be it physical—biological—social or economical has to be considered in restoring on rehabilitating him to take his full share in society once again an anticipation of such charges will to cope with the effects of the man in his new environment.

Thus atmospheric pollution, water pollution, the food and soil pollution, the man's surrounding environment continuously and constantly subjected to, when checked by the wisdom and skill of the man who is the architect to shape and bring forth a constructive health formula to the society.

Then evolves the recipe that has been well-enunciated by the World Health Organisation Expert Committee on " Public Health Administration " adapting winslow's earlier defini-

tion has defined it as " the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community efforts for the sanitation of the environment, the control of communicable infections, the education of the individual in personal hygiene, the organisation of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of social machinery to ensure for every individual a standard of living adequate for the maintenance of health so organising these benefits as to enable every citizen to realise his birth right of health and longevity."

And thus finally public health with regard to man and his environs, whatever condition it has to face is pertinent to all times and places. It is a science and art capable of adaptation to the physical and social demands of any country anywhere in the world.

The importance of Social and Preventive medicine to-day

The Social and Preventive approach to health leads the Doctor to think of the diseased person beyond the patient himself—to his family—his social conditions—his work place—of the community in which lives. The Preventive as well as the curative Doctor must think on lines designed to mobilize services and alteration in the environment to prevent disease. One vital reason for this new concept of health care is that it is particular urgent where the population is on the increase the iminant threat of hunger to the new population and the need to prevent mass diseases which limit food production and productivity in general. Doctors can contribute greatly to the economic development in a country and of raising agricultural and industrial productivity they can to be aware of the constant changing pattern in a contemporary society and of the new associated health problems that emerge with the changing pattern.

Health Education and Service Programmes

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with

Field Study and Demonstration Team of Health Education Bureau.

Maternal and Child Health

At ante-natal clinic the doctor examines the pregnant mothers and treat them according to their ailment. For instance, the doctor diagnoses anæmia in a pregnant mother and prescribes treatment. What the doctor is doing is purely a service which may cure the patient for the time being but may not prevent recurrence. So the need for information about what preventive measure would be taken arises. This is how this health education gets intertwined with service programme. Field Study and Demonstration Centre staff collect the ante-natal mothers and conduct mothers classes on anæmia. A case of anæmic mother is shown to the group and a demonstration of how anæmic blood would look like is shown by paper method of hb % testing. Now the mothers have known something about anæmia and they should know how to prevent or avoid it. Then the Field Study and Demonstration Centre staff will give an impressive talk on the role of diet in pregnancy with the aid of Kadigraph keeping in view the economic resources and availability in that area as to what vegetables, greens, etc., would be made use of. This is followed by a cooking demonstration of *keerai*, etc., to bring home to the mothers the correct technique of cooking so as to avoid loss of essential nutrients by improper cooking. A follow-up to their houses is carried out to ascertain how much

this educational prescription pays dividends. If some difficulty is felt by mothers at their homes in following what they have been taught, Field Study and Demonstration Centre will diagnose such difficulty and suggest suitable means to overcome it. Here is the need for a sound working relationship between the service staff and the educational staff.

Odema in Pregnancy

The doctor examines the ante-natal mother with odema of feet and prescribes treatment. Incidentally the doctor may advise the patient to be on *salt-free diet*. The patient may take the treatment but may not understand the necessity to take salt-free diet. Despite treatment, the odema may not subside because she will be taking salty diet. The failure of treatment can very well be avoided if she is told impressively about it. Here in Field Study and Demonstration Centre reinforces what the doctor has said incidentally, by conducting mothers' classes. A case of ante-natal mother with odema of feet is shown to the group and how such odema may be dangerous to the pregnancy. Demonstration of albumin in urine of such a patient is done. Then the mothers will be told by simple clear talk how the addition of salt in diet aggravates odema and how they can best avoid such condition by strictly following salt-free diet.

Infant Clinic

The doctor examines the children and prescribes treatment according to the diseases. But most of the infants are unkept and unclean. Field Study and Demonstration staff bring home to the group of mothers about how to keep their children tidy and clean and how unclean habits are caused for skin-infection and other ailments. Most of the mothers are ignorant about how to wean a child. They breast-feed or artificially feed their infants indefinitely. Field

Study Demonstration Centre staff will educate the **mothers** about the growing needs of the infants and **how introduction** of solids to the infants at the suitable time will **better substitute** the milk in meeting the growth requirements. To reinforce the information, a cooking demonstration of bengal-gram *kanjee* and infant feeding demonstration will be conducted for the mothers.

Family Planning

(Maternal and Child Health Centre, Health Unit, Poonamallee K.A.N. Clinic P.H.C. Avadi).

Family Planning service is given to mothers by way of distribution of contraceptives and sterilisation procedures. To make use of contraceptive is necessary for a mother with a child or so to space the pregnancy and sterilisation method advocated for mother with three children or more. As the concept of limiting the family is a personal matter and privacy, there is all the more the need to study and understand the behaviour patterns of the mothers. The programme will fail if attitude of the mothers is not taken into account and a suitable approach is found to gain their confidence and faith. The Field Study and Demonstration Centre staff will tell the mothers about the social and economic implication of a large family and will point out how repeated pregnancy will adversely affect the health of the mother with aid of flash cards. They will also indicate how the pregnancy can be avoided by resorting to the use of contraceptive and to sterilisation procedure in suitable cases. The mothers may feel shy of clearing the doubts about the use of contraceptive but they are individually taken into confidence and the details of how to use the contraceptives will be explained with the aid of models, etc. Here it is seen how the service is improved with health education techniques and methods.

School Health

(Harijan Welfare School, Panchayat Union School, Avadi Primary Health Centre area.)

The Medical Officer examines the children in school. He prescribes treatment for vitamin deficient (mainly A and B) and other ailments, etc. The children may be benefited by the treatment for some time but they are likely to suffer from recurrence. To avoid such recurrence, preventive measures have to be adopted with well-planned education.

Teacher Information Session

The teacher is taught about vitamin deficiencies with the case demonstrations, how to recognise such deficiency among children and how to correct them by proper dieting. The teacher in turn teaches the children about nutrition deficiency and how to avert it by intake of suitable articles of food, greens, yellow vegetables, etc. Teacher-parents meeting is arranged where the teacher makes the parents see the nutritional deficiency in their children and the steps for them to prevent. Teacher realises how strengthening of the menu in the midday meal will go a long way in preventing such nutritional deficiencies. He sees need for developing a kitchen garden, the produce of which is utilised for the mid-day meal menu. The parents in turn will also develop kitchen gardens to strengthen their menu. Here two fcts may be noted : (1) Knowledge about proper dieting and the need for developing kitchen garden; and (2) the yield of kitchen garden will be an addition to their slender economy.

Tuberculosis Programme

(Avadi Primary Health Centre, Health Unit Area.)

A good number of Tuberculosis patients come for treatment at Avadi Primary Health Centre and Kovur Sub-Centre. They are not aware of the nature of tuberculosis and hence

they break up the continuity of treatment now and then. Such irregularity in getting treatment will not only prolong the treatment indefinitely but will also result in the emergence of drug-resistant bacilli. This is of serious import and health education comes in handy to avert such a situation. The Field Study and Demonstration Centre staff collect the Tuberculosis patients at the out-patient and explain to them, the nature of diseases, the mode of spread, the need for regularity of treatment for not less than year and all the more the necessity of bringing the contacts for mass X'ray. The staff reinforce the information with a demonstration of disposal of sputum and the regularity of treatment with the aid of flash cards so that the patients thoroughly understand and follow the treatment and advice given. Periodic home visits are done to assess the educational impact, to discover any difficulties at home and to suggest suitable measures. The outcome of such education at Kunrathur is formation of T.B. Patients Committee and the Women's Health Committee at Kovur in which each member takes the responsibility to continue uninterrupted treatment and to bring house contacts for X'ray for case finding.

Leprosy

(Avadi Primary Health Centre and Kuthambakkam Sub-Centre.)

A few number of patients come to Centre for treatment. They feel that the disease is a curse and not curable. They feel frustrated over the protracted nature of treatment. Field Study and Demonstration Centre staff motivate the patients and infuse confidence in them that the disease is curable if they continue treatment for a long time. They will explain to the patients with aid of flash cards the causes, spread, how early cases of leprosy can be diagnosed and completely cured. Home delivery of tablets to a great extent solves the defaulter problem.

Birth and Death

N.V.K.K. NAMBIAR, M.A. DIP. (ECON.)
Statistical Assistant Director

It need hardly be emphasized that planning without relevant reliable statistics is impossible. It is reported that planning for the Third Five-Year Plan was handicapped by the lack of precise knowledge of the growth of the Indian population, excess of births over deaths plus immigration minus migration is responsible for the increase in population. The increase in births over deaths depends not only upon the fertility and mortality rates but also upon other agencies particularly the age constitution of the population. The age constitution will be favourable to births if there are a relatively large proportion of women within the child bearing ages and unfavourable otherwise.

Registration of births and deaths in different areas of Madras State.—The births and deaths are recorded in the rural areas under the statutory provisions contained in the Act III of 1899 which is in force in almost all the villages. In the few villages in backward tracts where the Act is not in force births and deaths are recorded under the executive instructions of the Revenue department. The unit of registration is a panchayat village or town. The village headman of the biggest revenue village included in the panchayat village is appointed as Birth and Death Registrar under section 5 (1) of the Act III of 1899 by the Collector of the district. In the rural areas transferred from the former Travancore-Cochin State registration of births and deaths is compulsory under the Travancore-Cochin Registration of Births and Deaths Act, 1953, and the health staff record the vital events. In Madras City the registration of births and deaths is done as per the Madras City Municipal Act, 1919, and in the municipalities under the Madras District Municipalities Act, 1920. In municipalities qualified Health Assistants are working as Birth and Death Registrars.

The time-limit for registration births in municipalities and the City of Madras is 7 days and in the case of rural areas the time-limit is 14 days. For registering deaths the time-limit is 36 hours in the case of municipalities and 4 days in the case of non-municipal areas and the City of Madras.

Reporting of births and deaths in different areas of the State—(1) *Rural areas*.—The reporting of birth has to be done by the father or midwife or every adult male member of the family resident in the house in which the child was born. Reporting of death has to be done by the nearest adult male relative, every adult male person present at death, occupier of the house or person living in the house or person undertaking the disposal of the corpse.

(2) *Municipal areas*.—The reporting of births is to be done by the father or mother of a child born in the municipality or in the absence of default of both the father or mother, the registered medical practitioner, vaidyan, hakim, midwife, nurse or dai assisting at birth or in default of the above occupier of the building in which the child was born. The reporting of the death is to be done by the nearest adult relative present at the death or in attendance during the last illness of every adult person present at death or the occupier of the building in which the death occurs, or every adult person living in the building in which the death occurred. In the case of deaths in which an inquest is held it shall be the duty of the officer who conducts the inquest to report the death.

(3) *Madras City*.—The reporting of birth is to be done by the father or mother of every child born in the city or in the absence or default of the father or mother the midwife assisting at birth or every adult male member of the family resident in the house in which the child was born. The reporting of death is to be done by the nearest adult male relative present at death or in attendance during the last illness or in default every adult male person present at death or in default the occupier of the house, if the occupier is an adult

male person or in his default every adult male person living in the house in which such death has happened. In the case of all hospital births and deaths it is the duty of the Medical Officer in charge of the hospital to report the events.

Compilation of Vital Statistics.—For every Panchayat village the headman of the biggest revenue village in the Panchayat village is working as Birth and Death Registrar. He submits a monthly abstract of births and deaths recorded in the registers to the Tahsildar who is the revenue official in charge of a taluk. The Tahsildar collects all the birth and death returns. The return for any month should be submitted by the Birth and Death Registrar to the Tahsildar of the concerned taluk by the 3rd of the succeeding month. The Tahsildars have to submit the returns for any month by the 8th of the succeeding month to the Director of Public Health and the balance if any by the 18th. The particulars are at present received for every Panchayat village and compiled in a special posting register and the vital statistics particulars furnished to the Registrar-General, Director-General of Health Services and the Madras Government Press for publication every month.

Importance of birth and death registration.—Every advanced country in the world has a good systematic system of registration of births and deaths. Birth and death registration records define the existence of an individual and a family in an established setting. Public health planning would be very efficient if the death rates were known by age, by geographic area, by cause, etc. It is not possible to assess the impact of Family Planning Programme because of deficiency in the registration of births. The pressure of births in the population as a whole is the immediate and specific indicator of impact of this particular programme. National planning, public health, family planning and the protection of the rights of individuals require the development of an accurate system of vital registration and statistics. The Government of India are contemplating for the enactment of central act on vital

statistics for the improvement of birth and death registration. Correct knowledge of births is essential for the successful working of Smallpox Eradication Programme and for the systematic development of maternal and child health services.

Improvement of official registration system.—There is a Birth and Death Registrar for every Panchayat village. It is considered useful to give short term refresher courses extending over a few days at local level to the Birth and Death Registrars regarding the registration and reporting procedures and mechanisms of detection of vital events. Besides every Birth and Death Registrar must have a board displayed in a conspicuous place in front of his office showing that he is the Birth and Death Registrar. Information from Maternity Assistants and Thayis regarding all the delivery cases conducted by them should be obtained and verified with the Birth Register in order to see that all the cases have been registered and whether there is any duplication. Regarding correct assessment of causes of death every registrar is supplied with a small pamphlet wherein conclusive and concise symptoms are given.

Detection of Births and Deaths by enquiring from knowledgeable persons like indigenous midwife, washermen, barber and village gossip will also help in improving the registration of births and deaths. It would also be useful if the village leaders and the general public are educated about the registration system and about its usefulness especially for establishing identity and age. The production of Birth certificate may be made obligatory (1) when the child joins the schools under the compulsory Elementary Education Programme, (2) whenever employment is sought in a public body or in a factory working under factory laws, (3) whenever the person marries and the marriage registration is done either voluntarily or compulsorily, (4) to establish nationality and percentage and (5) for inheritance of property and for taking life insurance policies and so on.

In Municipalities and such of those town panchayats where the relevant provisions of the Madras District Municipalities Act, 1920 relating to birth and death registration has been extended it is easy to improve death registration. In accordance with the Madras District Municipalities Act, 1920 no corpse can be disposed of except in licensed cremation or burial ground. If in addition those burial grounds are all provided with watchmen whose duty it will be to see that no corpse is disposed of in these grounds without the production of the certificate of registration of death then this will ensure that no death escapes registration. This is true in the case of all town panchayats that have taken up birth and death registration work.

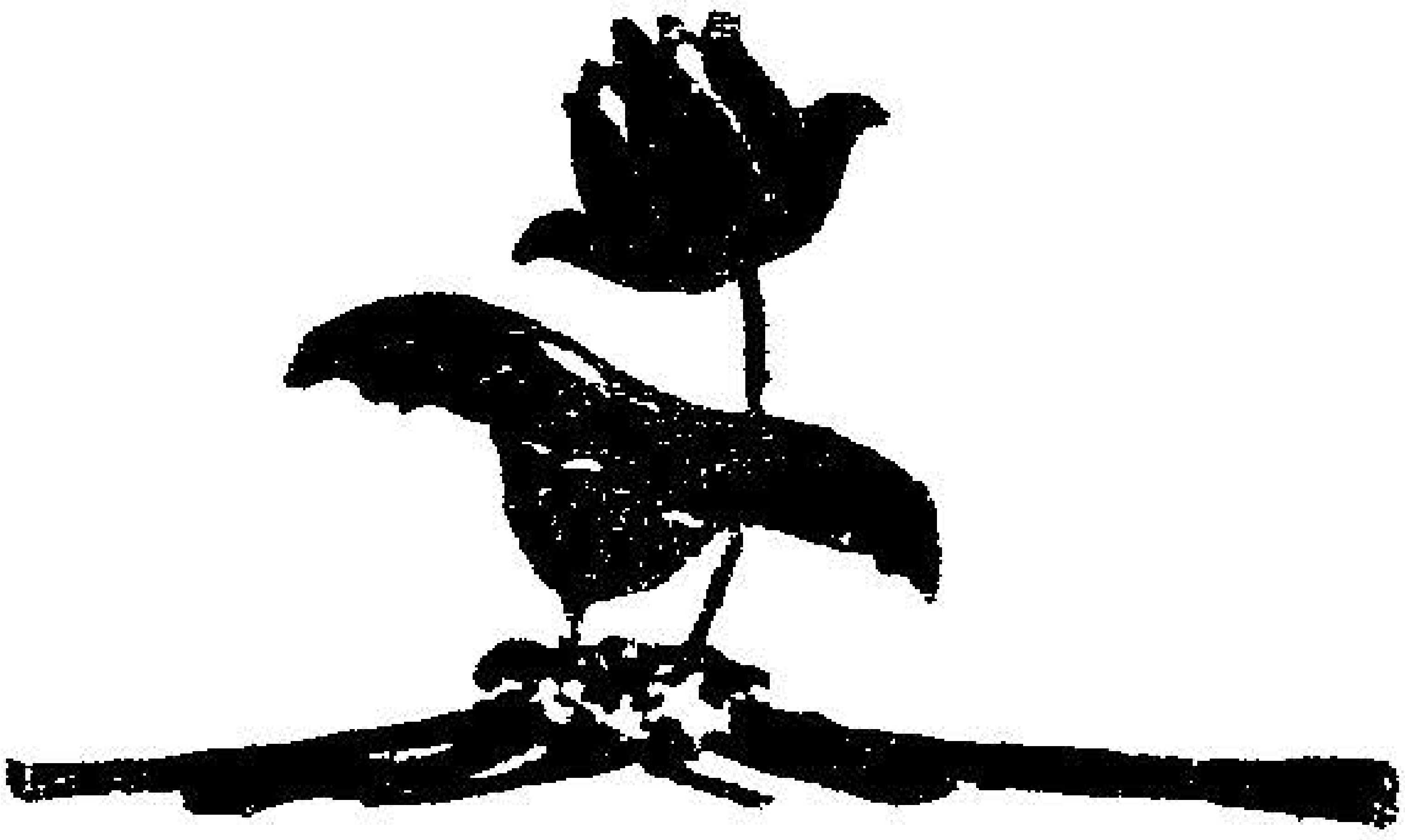
The health staff in their routine visits to the villages are expected to detect unregistered vital events. As per section 65 (*k*) of the Madras Panchayats Act, 1958 correct maintenance of vital statistics is the responsibility of the Panchayat Union. The health inspectors of the panchayat unions must maintain statistics of births and deaths recorded for every village for every month and besides this they must prepare the H.I. 34 giving particulars of unregistered births and deaths. As per G.O. P. No. 3142, dated 24th November 1961 every panchayat should hold a monthly meeting and the President of the Panchayat should read out entries relating to births and deaths recorded for the previous months. The Panchayatdars are required to report unregistered vital events. If the meeting is regularly held the same will definitely improve the registration of births and deaths. The Collectors of all districts may be requested to see that the meeting is regularly held in every panchayat village.

The objective of all accurate birth and death recording is to ensure that no birth or death escapes registration and the necessary particulars in regard to the births and deaths are accurately recorded in permanent records.

1,500,000 Doses of Polio Vaccine Donated to W.H.O.

Dr. M. G. Gandau, Director-General of the World Health Organization (WHO), announced that gifts of live polio vaccine totalling 1,500,000 doses have been offered to WHO by three British producers, Glaxo, the Pfizer Group and the Welcome Foundation.

These gifts of vaccine, designed to confer immunity against the viruses that cause poliomyelitis. are intended as an emergency reserve and not for routine control operations. They were accepted on behalf half the Organization by the Chairman of the WHO Executive Bo rd, Dr. Haroold B. Turbott, and will be credited to the Voluntary Fund fot Health Promotion, special acconnt for miscellaneous designated contributions. The Fund was established in 1960 and recei8es voluntary contributions for specific health projeets.



A Study of one thousand vasectomy Cases in Madras City

K. B. NAIR,
Health Educator, Family Planning.

This is a brief paper prepared to know the *social History* and background of one thousand men who have undergone vasectomy operatien in Madras City Hospitals.—*Editor.*

The unprecedented increase in population threatens the Indian nation with catastrophe. Every possible effort must be made to increase production of food and necessities of life. Even then. *control of population growth is necessary*, if we have to avoid economic breakdown and to prevent untold misery due to mass starvation and disease.

Among the various methods advocated and prescribed for birth control vasectomy operation proved to be the permanent, safest and least harmful one and hence the scheme is getting more response and approval even from the rural masses.

In this context it is interesting as well as important to know the social history and background of persons, who are sterilised.

Among the Indian States Madras State took the initiative in popularising and implementing this surgical method as early in 1958.

At present, vasectomy operations are done in 277 hospitals including some of the Primary Health Centres and eight hospitals run by voluntary organisations.

A father who is having three living children, and below fifty years of age can undergo this operation. One peculiarity of this scheme in this State is the existence of an intermediary. They are called canvessers whose function is to prepare fathers and bring them to the hospitals for the operation. They are rewarded by a sum of Rs. 10 per case by Government. This arrangement is only in the Madras City. At

present there are 76 canvassers working in the scheme bringing average 5 cases a day by each canvasser. Each father is paid a sum of Rs. 30, soon after the operation, to meet his loss of pay or conveyance charge.

One thousand vasectomy cases, operated in 1961 and 1962 in the four city hospitals are collected for this study. The purpose of this study is to know the different social aspects of these sterilized fathers, such as

1. Age.
2. Monthly income.
3. Educational status.
4. Religious group.
5. Number of living children to these fathers; and
6. Occupation of them.

Table I.

Age Group.

Serial number.	Age.	Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	24–29	5	0·5
2	30–39	699	69·9
3	40–49	296	29·6

The above table shows that 69.9 per cent of the sterilized fathers belong to the age group of 30 to 39 and 29.6 per cent of fathers belongs to the age group of 40 to 49 and only 0.5 per cent fathers are in the age group of 24 to 29.

Table II.

Income Group (Monthly).

Serial number.	Monthly income	Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	Unemployed (income nil.)	23	2·3
2	Below Rs. 50	715	71·5
3	Rs. 50–120	220	22
4	Rs. 101–200	33	3·3
5	Rs. 201 and above ..	9	0.9

Table No. 2 shows that 71.5 per cent of sterilized fathers are having only a monthly income of less than Rs. 50 and 22 per cent of them are having an income between Rs. 51 to Rs. 100 and 3.3 per cent of them are having an income of Rs. 101 to 200 and 0.9 per cent of them are having a monthly income of above 201 rupees and it is also noticed that 2.3 per cent of the sterilized fathers are unemployed. It reveals that majority of the sterilized fathers belong to lower income group. Another point is that poor people prefer a permanent remedy due to various reasons, such as lack of time, space, knowledge and finance to rely on temporary methods. Above all, the reward Rs. 30 fixed by the Government for sterilized father also attracts a lot of poor people.

TABLE III.

Serial number.	Number of living children.	Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	Having 3 children ..	670	67
2	Having 4 children ..	231	23·1
3	Having 5 children ..	99	9·9

Table No. III shows that 67 per cent of the sterilized are having only 3 children, 23.1 per cent of them are having four children and 9.9 per cent of fathers are having 5 and above. It is found that generally fathers who are coming for this operation prefer to give a wrong number which is less than the actual number of living children to them. This phenomenon is common even among highly educated people.

TABLE IV.

Serial number.	Educational Status.	Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	Below Metric ..	962	96·2
2	Metric and above ..	33	3·3
3	Graduates and above ..	5	5

Out of this 1,000 cases it is found that 96.2 per cent of fathers are not even Metric. This group consists of literate and illiterate people. Literate in the sense, that they can read and write the regional language. 3.3 per cent of them are Metric and above and 0.5 per cent of them are graduates and post-graduates. This shows that there is spontaneous response to this scheme from the low income group and less educated people. They are the needy as well as the victims.

TABLE V.

Occupation

Serial number.		Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	Clerical	37	3·7
2	Teachers	4	0·4
3	Coolies and daily wage earners.	906	90.6
4	Agriculturist	30	3
5	Unemployed	23	2·3

The above table reveals the occupational position of the sterilized fathers. It is found that 90.6 per cent of the sterilized fathers are daily wage earners and coolies. They are not having any permanent employment and wages are comparatively poor. 3.7 per cent are clerks employed in Government Offices. Three per cent of them are agricultu-rists. 2.3 per cent are unemployed and 0.4 per cent of them are teachers.

TABLE VI.

Religious Group

Serial number.	Religion.	Number of persons.	Percentage.
(1)	(2)	(3)	(4)
1	Hindus	934	93.4
2	Muslims	46	4·6
3	Christians	20	

Table number 6 shows that 93.4 per cent of the sterilized fathers are Hindus, 4.6 per cent are Muslims and 2 per cent are Christians. Majority of them are Hindus, Muslims and Christians are reluctant to adopt this method. It is mainly due to rigidity in faith and religious sentiments. Lack of effective and intelligent progranda in areas where these communities reside in large number is one of the causes for the reluctance. Thirdly the canvassers in the City are a force, in persuading fathers for sterilization. Majority of these canvassers are Hindus. They find it easy to canvass and convince people of their own community.

Summary

It is noticed that vesectomy operation is comparatively more popular among Hindus than Muslims and Christians. There is no such organised resistance to this scheme from any of these communities.

The monthly income of fathers who have undergone this operation is very low.

How to save 20,000 lives a year on the Road

* Give immediate aid to the injured.
* Improve ambulance services.
* First aid courses for would-be drivers.

Better first aid and care during transport to hospital could save the lives of approximately 20 per cent of road accident victims. Since more than 100,000 people succumb to traffic accidents throughout the world every year, this would mean the saving of 20,000 lives annually.

For in spite of much discussion about accident prevention, widening, re-designing and multiplying roads, safer cars and safety devices, education and other measures to stop negligent and reckless driving mortality rates are still high. Since road accidents are likely to be a part of modern life for a good time to come, more effort is necessary to reduce death and disability by giving immediate and proper aid to the injured, an article in the WHO Chronicle for September states.

Quick action necessary.—Laymen and ambulance drivers should be better trained in first aid, since doctors are usually not on the spot. Even some doctors are themselves poorly trained for this work, according to participants in technical discussions on resuscitation and casualty services, held under the auspices of the WHO Regional Office for Europe

Head injuries are among the most frequent in road accidents the incidence varies between 50 and 80 per cent; and thoracic injuries are common, between 10 and 40 per cent. Both may affect the respiratory system, and studies in several European countries have shown the importance of obstruction of the air passages as a cause of death.

Revive shock victims

Most people with head injuries become unconscious immediately. This does not necessarily mean that the injury is serious but it may cause breathing to cease temporarily. Cerebal shock will also influence respiration as will a chest injury. Deprivation of oxygen for 6 to 10 minutes causes irreparable damage to the brain, consequently airways must be cleared and artificial respiration begun within that time.

Mouth-to-mouth and mouth-to-nose artificial respiration is now considered by most authorities to be the best method. It is the quickest way of beginning artificial respiration since the lungs can be ventilated as soon as the rescuer can reach the head, and he can constantly check to make sure the air passages are not obstructed. This method assures the greatest ventilation of the lungs and oxygenation of the blood; it is the least tiring, requires no strength and can be carried out by a child.

Other vital measures are to stop bleeding and to counteract shock. Severe arterial bleeding can be controlled by direct pressure on the place of bleeding with a clean cloth or even the hand, for the risk of infection may be much less than the risk of death. To counter shock the victim's head should be placed lower than his feet to use the blood supply to best advantage.

Know first aid techniques.—Such simple measures, given immediately, could save many lives, and still more people could be helped by persons trained in first aid—of whom many are needed. The experts assembled by WHO made a strong recommendation that everyone who receives a driving licence should have the necessary knowledge to give immediate aid. Ambulance should be equipped for resuscitation and treatment of shock.

Many other methods exist of giving quicker and more efficient care to the injured that could be more widely used, including appropriate organization and staffing of ambulances and of hospitals receiving patients. But the answers to all the problems are not known, and research is still needed.

" The Biggest Health Programme of the World."

Dr. K. Raska, Director, Division of Communicable Diseases World Health Organisation Geneva, along with Dr. A. Zahra, Assistant Director, Health Services, W.H.O., New Delhi, paid a visit in the Union Health Ministry on 14th April 1964 and discussed progress of National Smallpox Eradication Programme in India, with Dr. K. M. Lal, Deputy Director-General of Health Services and Dr. Mahendra Singh, Deputy Assistant Director-General (Smallpox), Dr. Raska also studied the position of Smallpox cases in India. He described the National Smallpox Eradication Programme of India as " the biggest public health programme in the World ".

Facts about Epidemic Haemorrhagic Fever

[Dengue—Dengue like—Chikungunya Fever]

What is Epidemic Haemorrhagic Fever ?

It is a specific fever caused by a group of viruses like Chikungunya, Dengue, etc. This disease is marked by high temperature with intense headache and pains all over the body and joints. So this is also called " Break Bone Fever ". Vomitting is quite common and sometimes very severe too. Irregular eruptions or rash may also appear in the body. This may be of different types.

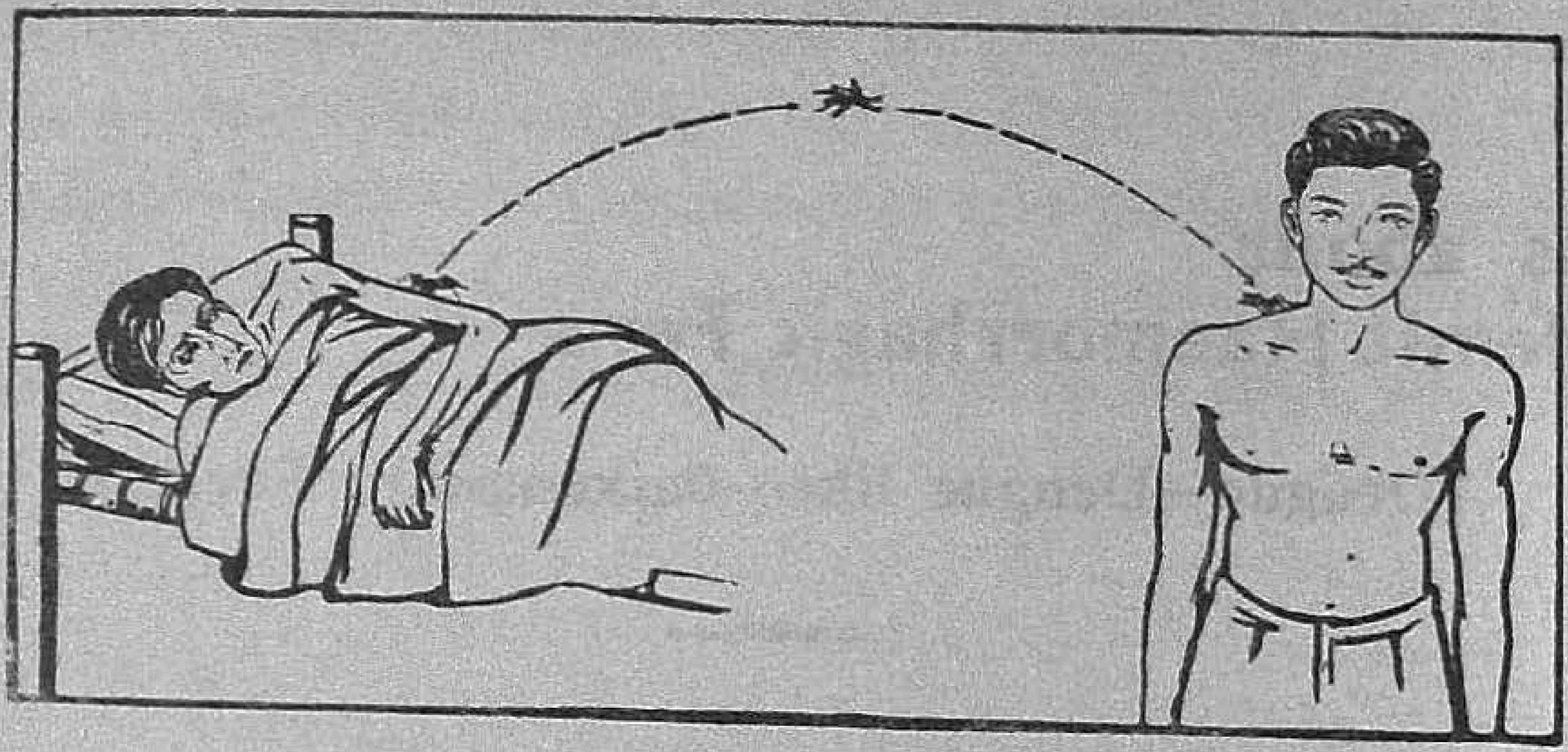
Usually the attack is sudden and the fever rapidly increases even up to 106°F. The temperature may continued for two to three days and comes down, and in another two days fever becomes more severe than in the initial stage.

Almost all men, women, children are likely to get the fever.

The patient will become terribly weak and pains will persist in the joints for considerable time. Since some patients sometime develop bleeding from various parts of their body it is called Hæmorrhagic fever. They may have bleeding from Nose, Gums; they may cough or vomit blood or pass blood in stools.

How it spreads ?

These viruses can be transmitted from a patient to a healthy man only through mosquitoes and mostly by Aedes mosquitoes. The blood of a patient contains the virus, and the mosquito that bites the patient may get infected with the

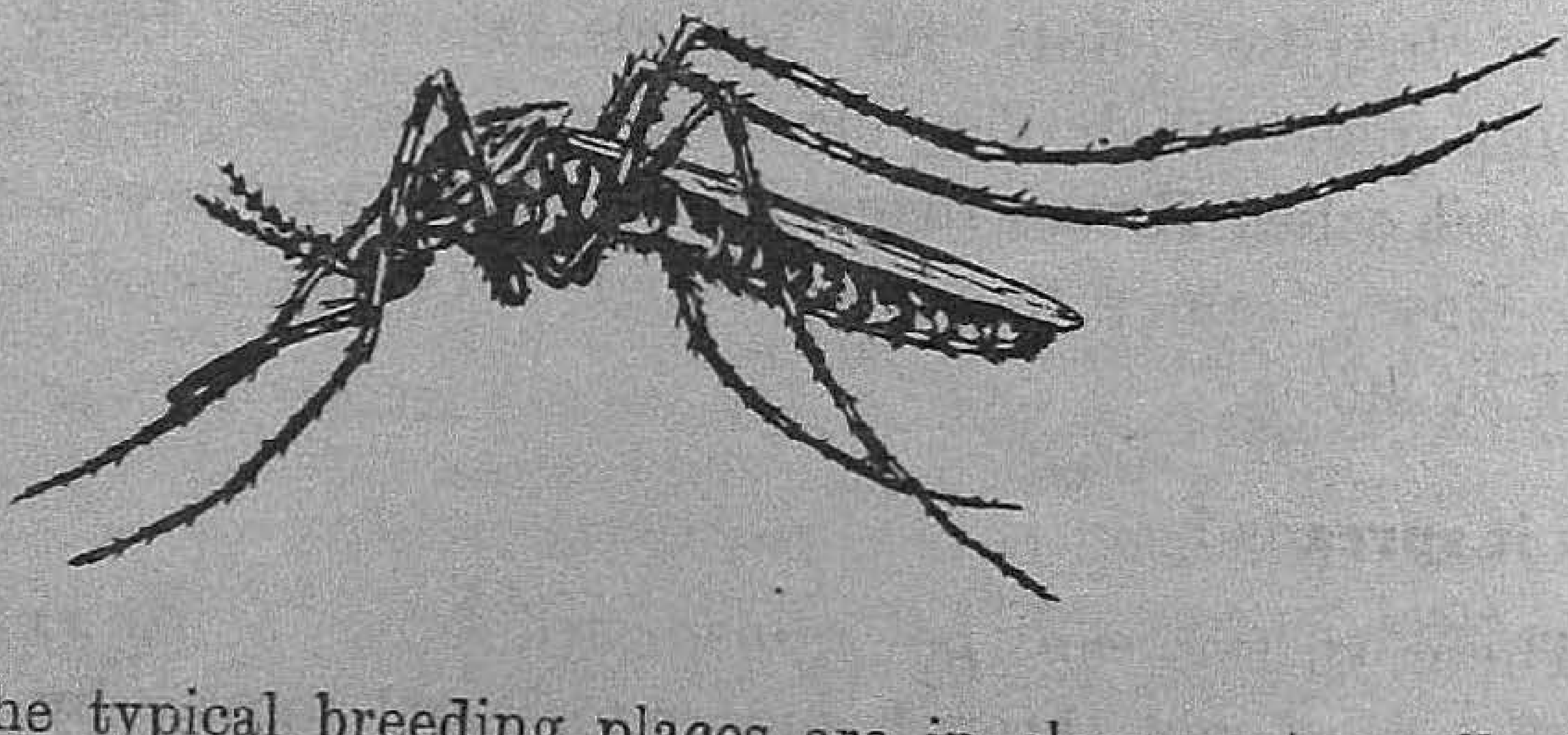


virus and that particular mosquito, that has been infected becomes infective. The mosquito, while biting a healthy person passes the disease into his body.

The Disease Carrier—"Aedes Mosquito"

The species of mosquitoes known as Aedes are notorious because of their ability to transmit the virus of the diseases of Dengue, Dengue like and Chikungunya.

These Aedes mosquitoes are ornamented with silvery white marks on the back, abdomen and legs. Hence, also known as the "Tiger Mosquito". These are highly domestic species and prefer various types of breeding places in **and around** the houses.



The typical breeding places are in clean water collections of rain water of temporary nature, in broken pots, tin cans, coconut shells, flower pots, cement cistens, metal **tanks and**

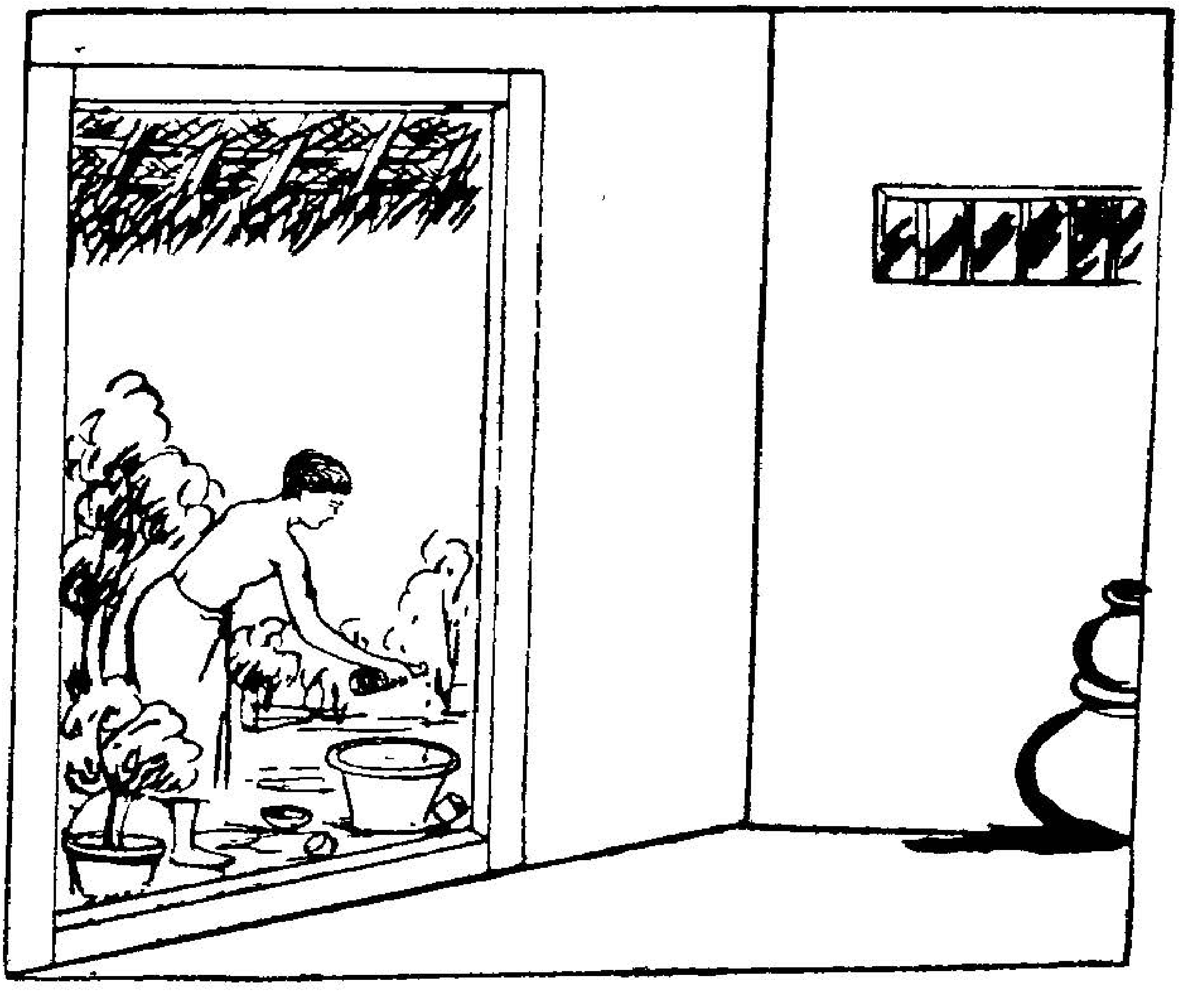
ornamental ponds in the gardens. This variety of mosquitoes do not breed in the dirty water of cesspools or stinking drains. The mosquitoes which breed in dirty water do not cause this fever.

The eggs of these mosquitoes are capable of remaining alive without hatching for several months in the containers, where they are laid, and when the containers are filled with water by a sharp shower the larvae hatch out. Unlike other kind of mosquitoes which usually bite during night time, the Aedes are hungry biters only during day time.

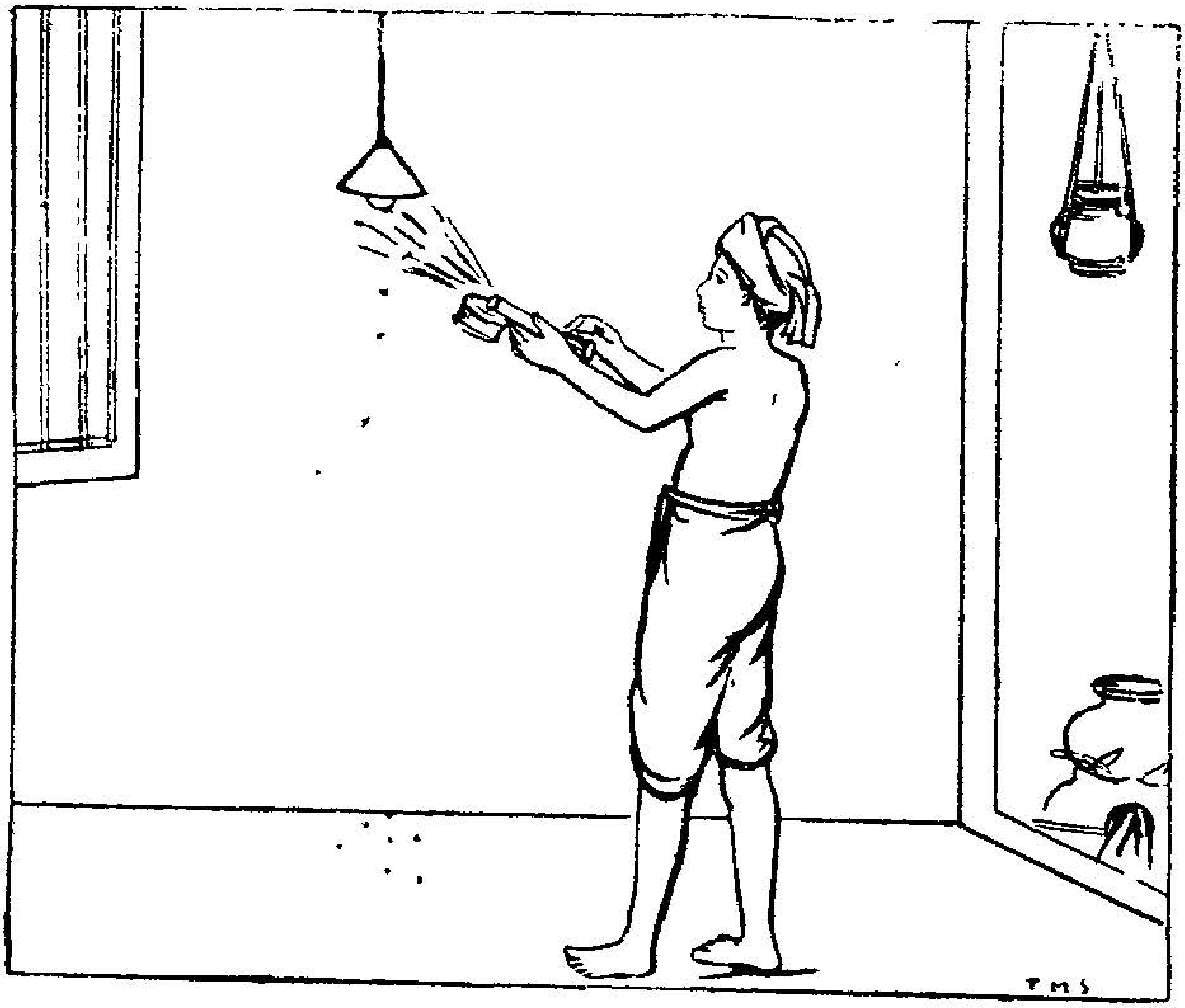
How to control Aedes Mosquitoes?

As there is no known immunization or vaccination against this group of viruses, the only way to control the disease is to control the breeding of Aedes mosquitoes.

The control of these mosquitoes can be best achieved by elminating all types of artificial containers where they breed. In and around the houses, the water in these containers (the



broken pots, tins, coconut shells, etc.) should be emptied frequently. In such of those places, where emptying is not possible, mosquito control oil, or crude oil, or kerosene oil can be sprinkled, which kill the larvae, before they grow further. This should be done once every week.



To control the Aedes mosquitoes within the houses, the best method is spray with Pyrethram extract mixed in kerosene to make 0.1 per cent strength. The spraying can be done by means of a hand pump.

Prevention and Treatment

There is no specific medicine for the treatment of this fever. But the patient should take complete rest in bed. Good nourishing and treatment for the fever and pains may give relief.

All fever cases with joint pains should be promptly reported to your health authority.

Publicity materials on " Mother and Child Health " available in Madras State Health Education Bureau

Folders and Pamphlets

1. " Mother and Child "—(English and Tamil).
2. Children's Day—(Tamil).
3. Puerperal Sepsis—(Tamil).

Films and Filmstrips—A Brief Synopsis

1. *Ashok Vihar*—(Silent).

This film is about multifarious activities of Ashok Vihar, a health and recreation centre for children, run by Corporation of Madras.

2. *Before the Baby Comes*—(English).

This film covers the activities of a typical Village Health Centre in India and how it helps the expectant mother in pre-natal and maternal care. It shows in detail child birth step by step and what should be done by safe delivery of healthy baby, how to bathe a baby, etc. From the village mothers standpoint it describes in detail the reason for sanitary and health measures in maternal and child care.

3. *Chinna Papa*—(Tamil).

This film was jointly produced by the State Health Department and Christian Medical College, Vellore. The first section " Before the Baby Comes " explains the need for medical check-up at a maternity centre. The second section " Baby Arrives " explains in detail the precautions to be taken before child birth. The third section " After the

Baby Comes " explains the cleanliness to be observed in breast-feeding and advice by the nurse for the proper growth of the baby.

4. *Infant Care—(English and Tamil).*

Family with four healthy children is expecting " Little Number Five ". Wise mother visits pre-natal clinic—eats good nourishing food—milk boiled—fresh vegetables, eggs, meat, fish, fruits, all help the growth of the baby within the womb. After little number five is born breast milk is fed. Again mother takes proper nourishing diet which is essential for breast milk. Proper care of the baby when he is very young and proper feeding after he begins to take solid food, makes him strong and healthy. He is also immunized against infectious diseases.

5. *Ripening seeds—(Tamil).*

Tracing the growth of a child from its infancy, this documentary narrates the correct method of bringing up children.

6. *Your Baby—(Tamil).*

Practical suggestions for baby care are given in this film. A useful guide for mothers giving them practical hints for pre-natal care. This film emphasises the need for both parents to share in the care and up bringing of the child.

7. *Your Baby can be healthy—(Tamil).*

This film explains the growth and development of the baby from birth to one year and shows nutrition, hyjene and general health measures, which the Indian Rural mother should take to keep her child healthy.

8. *Baby can be healthy—Filmstrip.*

It is about how to keep a child healthy.

9. *Before the Baby comes—Filmstrip.*

Pre-natal and maternal care—what should be done for safe delivery of a health baby—health measures in maternal and child care.

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